

## ABSTRACT OF THE DISCLOSURE

A device and method for positioning and controlling railway vehicles. The device includes fixed stations (1) including first elements for transmitting/receiving (2) signals and a central control station (3) to which the fixed stations (1) are connected. Each railway vehicle (4) includes second elements for transmitting/receiving (6) signals. The signals transmitted by the first and second transmitting/receiving elements (2, 6) including an identifier specific to the transmitter and at least one message and consist in non-sinusoidal radio signals with very large bandwidth whose spectrum ranges between 1 and 10 GHz. Each railway vehicle (4) and each fixed station (1) include processing elements (8) for determining the identifier and the at least one message of each received signal. The central control station (3) sends command control instructions.